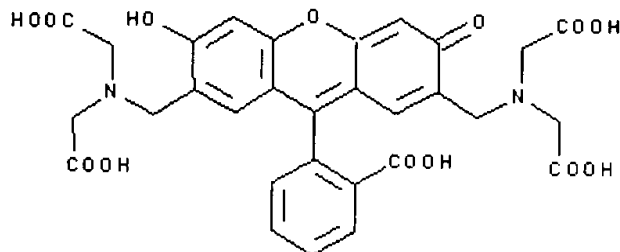


PRODUCT CODE: **122053**

Calc in PA
for complexometry

$C_{30}H_{26}N_2O_{13}$



M. = 622,54
NC 3204 16 00

CAS [1461-15-0]

EINECS 215-957-1

SYNONYMS: Fluorexone • bis-[N,N-bis-(Carboximethyl)Aminomethyl] Fluorescein • Fluorescein Complexone •

PHYSICAL DATA: Orange powder • Solubility in water 4 g/l. In alcohol 0,6 g/l • M. P.: 300 °C dec. •

APPLICATIONS: Reagent for Ca : R. L. Olsen et al. , *Talanta* , **7** , 187 (1961) ; H. Gibitz , *Ärztl. Lab.* , **9** , 389 (1963) • Indicator for the complexometric determination of Ca and Mg : B. M. Tucker , *Analyst* , **82** , 284 (1957) ; R. Pribil , *Ibid.* , **83** , 188 (1958) ; T. Y. Toribara , L. Koval , *Talanta* , **7** , 248 (1961) • Determination of Ca in biological systems : J. F. Dandrowki , C. L. Benson , *Clin. Chem.* , **18** , 1411 (1972) ; V. C. K. Chiu , D. H. Haynes , *J. Biophys.* , **18** , 3 (1977) •

BIBLIOGRAPHY: Beilstein **19** , III/IV, 4338 • Conn's **IX** , 341 • K. L. Cheng et al. , "Handbook of Organic Analytical Reagents", 225-230 , CRC , Boca Raton (Florida) (1982) •

SPECIFICATIONS:

Identity	IR p/t.
λ of max. ABS. in NaOH 0,002 mol/l	492-500 nm
A 1%, 1cm, λ_{max}	>650
T.L.C	p/t.

MAXIMUM LIMIT OF IMPURITIES

Insoluble matter in NaOH	p/t.
Loss on drying at 135°C	15 %
Suitability as complexometric indicator.	p/t.

	Hits	Search Text	DBs
1	65	426/\$.ccls. and (chromophore or fluorophore)	USPAT; US-PGPU B; EPO; JPO; DERWENT
2	7	426/\$.ccls. and (chromophore or fluorophore)	USOCR
3	178	(sensing or sensor or senses or indicia or indicating or indicate)same ((chromophore or fluorophore) and gas)	USPAT; US-PGPU B; EPO; JPO; DERWENT
4	464	(sensing or sensor or senses or indicia or indicating or indicate or detection or detecting or detect)same ((chromophore or fluorophore) and gas)	USPAT; US-PGPU B; EPO; JPO; DERWENT
5	126	((sensing or sensor or senses or indicia or indicating or indicate or detection or detecting or detect)same ((chromophore or fluorophore) and gas)) and (food or vegetable or meat)	USPAT; US-PGPU B; EPO; JPO; DERWENT
6	21	((sensing or sensor or senses or indicia or indicating or indicate or detection or detecting or detect)same ((chromophore or fluorophore) and gas)) and (food or vegetable or meat) and palladium	USPAT; US-PGPU B; EPO; JPO; DERWENT
7	78	((sensing or sensor or senses or indicia or indicating or indicate or detection or detecting or detect)same ((chromophore or fluorophore) and gas)) and palladium	USPAT; US-PGPU B; EPO; JPO; DERWENT
8	19	((sensing or sensor or senses or indicia or indicating or indicate or detection or detecting or detect)same ((chromophore or fluorophore) and gas)) and (food or vegetable or meat) same (packag\$3 or film or bag or container)	USPAT; US-PGPU B; EPO; JPO; DERWENT
9	6	(sensing or sensor or senses or indicia or indicating or indicate)same (spoiled or spoilage) and (chromophore or fluorophore)	USPAT; US-PGPU B; EPO; JPO; DERWENT
10	188	((sensing or sensor or senses or indicia or indicating or indicate)same (spoiled or spoilage or contamination or contaminants)) and (chromophore or fluorophore)	USPAT; US-PGPU B; EPO; JPO; DERWENT
11	13	((sensing or sensor or senses or indicia or indicating or indicate)same (spoiled or spoilage or contamination or contaminants)) and (chromophore or fluorophore)) and (food or vegetable or meat) same (packag\$3 or film or bag or container)	USPAT; US-PGPU B; EPO; JPO; DERWENT
12	13	(sensing or sensor or senses or indicia or indicating or indicate)same (spoiled or spoilage) and (426/231 or 426/232)	USPAT; US-PGPU B; EPO; JPO; DERWENT
13	0	((sensing or sensor or senses or indicia or indicating or indicate)same (spoiled or spoilage) and (426/231 or 426/232)) and palladium	USPAT; US-PGPU B; EPO; JPO; DERWENT
14	8	("2485566" "2626855" "3067015" "4003709" "4285697" "4308028" "5306466" "5439648").PN.	USPAT
15	176	(426/232).CCLS.	USPAT; US-PGPU B; EPO; JPO; DERWENT
16	633	(426/231).CCLS.	USPAT; US-PGPU B; EPO; JPO; DERWENT

	Hits	Search Text	DBs
17	407	(426/87).CCLS.	USPAT; US-PGPU B; EPO; JPO; DERWENT
18	449	(426/112).CCLS.	USPAT; US-PGPU B; EPO; JPO; DERWENT
19	1	73/866.3 and palladium	USPAT; US-PGPU B; EPO; JPO; DERWENT
20	237	(422/82.07).CCLS.	USPAT; US-PGPU B; EPO; JPO; DERWENT
21	597	(422/82.08).CCLS.	USPAT; US-PGPU B; EPO; JPO; DERWENT
22	3	((422/82.07).CCLS.) or ((422/82.08).CCLS.)) and (chromophore or fluorophore) and (food or vegetable or meat) same (packag\$3 or film or bag or container)	USPAT; US-PGPU B; EPO; JPO; DERWENT
23	5	(fluorexon or flourescein) and (food or vegetable or meat) same (packag\$3 or film or bag or container)	USPAT; US-PGPU B; EPO; JPO; DERWENT
24	314	(fluorexon or fluorescein) and (food or vegetable or meat) same (packag\$3 or film or bag or container)	USPAT; US-PGPU B; EPO; JPO; DERWENT
25	32	calcein same (chromophore or fluorophore)	USPAT; US-PGPU B; EPO; JPO; DERWENT
26	1	"1960552"	EPO; DERWENT
27	1	"19605522"	EPO; DERWENT
28	2	"0449798"	EPO; DERWENT
29	3	"4332512"	EPO; DERWENT
30	308	((sensing or sensor or senses or indicia or inidicating or indicate or detection or detecting or detect) same spoil\$3) and (food or vegetable or meat) same (packag\$3 or film or bag or container)	USPAT; US-PGPU B; EPO; JPO; DERWENT
31	6	((sensing or sensor or senses or indicia or inidicating or indicate or detection or detecting or detect) same spoil\$3) and (food or vegetable or meat) same (packag\$3 or film or bag or container)) and palladium	USPAT; US-PGPU B; EPO; JPO; DERWENT
32	49	((426/232).CCLS.) or ((426/231).CCLS.) or ((426/87).CCLS.) or ((422/82.07).CCLS.) or ((422/82.08).CCLS.)) and palladium	USPAT; US-PGPU B; EPO; JPO; DERWENT
33	1	((426/232).CCLS.) or ((426/231).CCLS.) or ((426/87).CCLS.) or ((422/82.07).CCLS.) or ((422/82.08).CCLS.)) and fluorexon	USPAT; US-PGPU B; EPO; JPO; DERWENT

	Hits	Search Text	DBs
34	1	((426/232).CCLS.) or ((426/231).CCLS.) or ((426/87).CCLS.) or ((422/82.07).CCLS.) or ((422/82.08).CCLS.)) and (calcein with blue)	USPAT; US-PGPU B; EPO; JPO; DERWENT
35	1	((426/232).CCLS.) or ((426/231).CCLS.) or ((426/87).CCLS.) or ((422/82.07).CCLS.) or ((422/82.08).CCLS.)) and (calcein same blue)	USPAT; US-PGPU B; EPO; JPO; DERWENT
36	4	(food or vegetable or meat) same (packag\$3 or film or bag or container) and (calcein same blue)	USPAT; US-PGPU B; EPO; JPO; DERWENT
37	11	(food or vegetable or meat) same (packag\$3 or film or bag or container) and (calcein)	USPAT; US-PGPU B; EPO; JPO; DERWENT
38	0	palladium same (calcein)	USPAT; US-PGPU B; EPO; JPO; DERWENT
39	124	palladium and (calcein)	USPAT; US-PGPU B; EPO; JPO; DERWENT
40	320	(fluorexon or fluorescein or calcein) and (food or vegetable or meat) same (packag\$3 or film or bag or container)	USPAT; US-PGPU B; EPO; JPO; DERWENT
41	3	fluorexon and ((fluorexon or fluorescein or calcein) and (food or vegetable or meat) same (packag\$3 or film or bag or container))	USPAT; US-PGPU B; EPO; JPO; DERWENT
42	22	((fluorexon or fluorescein or calcein) and (food or vegetable or meat) same (packag\$3 or film or bag or container)) and palladium	USPAT; US-PGPU B; EPO; JPO; DERWENT
43	1	(fluorexon and palladium)	USPAT; US-PGPU B; EPO; JPO; DERWENT
44	62	(calcein and palladium) and (food or vegetable or meat)	USPAT; US-PGPU B; EPO; JPO; DERWENT
45	0	(sensing or sensor or senses or indicia or indicating or indicate or detect\$3)same (spoiled or spoilage) and calcein and palladium	USPAT; US-PGPU B; EPO; JPO; DERWENT
46	3	(sensing or sensor or senses or indicia or indicating or indicate or detect\$3)same (spoiled or spoilage) and calcein	USPAT; US-PGPU B; EPO; JPO; DERWENT
47	2	(sensing or sensor or senses or indicia or indicating or indicate or detect\$3)same (spoiled or spoilage) and calcein and metal	USPAT; US-PGPU B; EPO; JPO; DERWENT

	Hits	Search Text	DBs
48	33	("2485556" "3067015" "3520124" "4003709" "4066403" "4098577" "4105800" "4154107" "4195056" "4195058" "4212153" "4285697" "4292916" "4938389" "5045283" "5053339" "5058088" "5085802" "5096813" "5156780" "5180598" "5182212" "5254473" "5306466" "5407829" "5439648" "5443987" "5653941" "5663072" "5753285" "5876753" "5981614" "6057162").PN	USPAT
49	0	(Fluorescein adj complexon) and palladium	USPAT; US-PGPU B; EPO; JPO; DERWENT
50	2	(sensing or sensor or senses or indicia or indicating or indicate or detect\$3)same (spoiled or spoilage) and(Fluorescein adj complexon) and metal	USPAT; US-PGPU B; EPO; JPO; DERWENT
51	2	(sensing or sensor or senses or indicia or indicating or indicate or detect\$3)same (spoiled or spoilage) and(Fluorescein adj complexon)	USPAT; US-PGPU B; EPO; JPO; DERWENT
52	2	(sensing or sensor or senses or indicia or indicating or indicate or detect\$3)same (spoiled or spoilage) and(Fluorescein with complexon)	USPAT; US-PGPU B; EPO; JPO; DERWENT
53	3	(sensing or sensor or senses or indicia or indicating or indicate or detect\$3)same (spoiled or spoilage) and(Fluorescein and calcein)	USPAT; US-PGPU B; EPO; JPO; DERWENT
54	895	(sensing or sensor or senses or indicia or indicating or indicate or detect\$3)and((Fluorescein adj complexon)or calcein)	USPAT; US-PGPU B; EPO; JPO; DERWENT
55	115	((sensing or sensor or senses or indicia or indicating or indicate or detect\$3)and((Fluorescein adj complexon)or calcein)) and palladium	USPAT; US-PGPU B; EPO; JPO; DERWENT
56	3	sensing or sensor or senses or indicia or indicating or indicate or detect\$3)and(Fluorescein adj complexon	USPAT; US-PGPU B; EPO; JPO; DERWENT
57	2	fluorexon and (Fluorescein adj complexon)	USPAT; US-PGPU B; EPO; JPO; DERWENT
58	3	calcein and(Fluorescein adj complexon)	USPAT; US-PGPU B; EPO; JPO; DERWENT
59	0	calcein and(Fluorescein adj complexon) and palladium	USPAT; US-PGPU B; EPO; JPO; DERWENT
60	124	(calcein or (Fluorescein adj complexon)) and palladium	USPAT; US-PGPU B; EPO; JPO; DERWENT
61	537	(sensing or sensor or senses or indicia or indicating or indicate or detect\$3)and((Fluorescein adj complexon)or calcein) and metal	USPAT; US-PGPU B; EPO; JPO; DERWENT

	Hits	Search Text	DBs
62	226	(sensing or sensor or senses or indicia or indicating or indicate or detect\$3)and((Fluorescein adj complexon)or calcein) and metal and (food or meat or vegetables)	USPAT; US-PGPU B; EPO; JPO; DERWENT
63	33	("2485556" "3067015" "3520124" "4003709" "4066403" "4098577" "4105800" "4154107" "4195056" "4195058" "4212153" "4285697" "4292916" "4938389" "5045283" "5053339" "5058088" "5085802" "5096813" "5156780" "5180598" "5182212" "5254473" "5306466" "5407829" "5439648" "5443987" "5653941" "5663072" "5753285" "5876753" "5981614" "6057162").PN.	USPAT
64	142	(sensing or sensor or senses or indicia or indicating or indicate or detect\$3)and((Fluorescein adj complexon)or calcein) and pd	USPAT; US-PGPU B; EPO; JPO; DERWENT
65	53	((sensing or sensor or senses or indicia or indicating or indicate or detect\$3)and((Fluorescein adj complexon)or calcein) and metal and (food or meat or vegetables)) and pd	USPAT; US-PGPU B; EPO; JPO; DERWENT
66	173	((sensing or sensor or senses or indicia or indicating or indicate or detect\$3)and((Fluorescein adj complexon)or calcein) and metal and (food or meat or vegetables)) not ((calcein or (Fluorescein adj complexon)) and palladium)	USPAT; US-PGPU B; EPO; JPO; DERWENT
67	80	((calcein or (Fluorescein adj complexon)) and palladium) not (((sensing or sensor or senses or indicia or indicating or indicate or detect\$3)and((Fluorescein adj complexon)or calcein) and metal and (food or meat or vegetables)) and pd)	USPAT; US-PGPU B; EPO; JPO; DERWENT
68	173	((sensing or sensor or senses or indicia or indicating or indicate or detect\$3)and((Fluorescein adj complexon)or calcein) and metal and (food or meat or vegetables)) not (((sensing or sensor or senses or indicia or indicating or indicate or detect\$3)and((Fluorescein adj complexon)or calcein) and metal and (food or meat or vegetables)) and pd)	USPAT; US-PGPU B; EPO; JPO; DERWENT
69	3	"6428748"	USPAT; US-PGPU B; EPO; JPO; DERWENT
70	1	2002-627490.NRAN.	DERWENT
71	5	"2184677"	EPO; JPO; DERWENT
72	8	"273570"	EPO; JPO; DERWENT
73	1	"5321147"	EPO; JPO; DERWENT
74	2	"2735705"	EPO; JPO; DERWENT
75	1	"05321147"	JPO
76	0	bis?carboxymethyl?aminomethyl with fluorescein	USPAT; EPO; JPO; DERWENT
77	0	carboxymethyl?aminomethyl with fluorescein	USPAT; EPO; JPO; DERWENT

	Hits	Search Text	DBs
78	200	fluorescein and calcein	USPAT; EPO; JPO; DERWENT
79	2	fluorescein adj complexone	USPAT; EPO; JPO; DERWENT
80	4	(fluorescein adj complexone) or fluorexone	USPAT; EPO; JPO; DERWENT
81	2	((fluorescein adj complexone) or fluorexone) and (metal or palladium)	USPAT; EPO; JPO; DERWENT
82	88	calcein and palladium	USPAT; EPO; JPO; DERWENT
83	18028	calcein and palladium and 3-bromo-5H, 6H, 12H, 13H-indeno[2,3-a]pyrrolo[3,4-c]c arbazole-7(7H)	USPAT; EPO; JPO; DERWENT
84	3	oftasceine	USPAT; EPO; JPO; DERWENT